



DPER Obs on the Draft Memo for Government on the National Broadband Plan

REF #:	PER 00431-19	AUTHOR:	Brendan Ellison
TO:	Minister	OWNER:	Brendan Ellison
STATUS:	Completed	REVIEWERS:	Brendan Ellison, Robert Watt
PURPOSE:	Observations - For Approval	DECISION BY:	
DIVISION/OFFICE:	Expenditure Management, EU Policy and Audit		

Final comment

Thanks all. These are to be issued in addition to my ministerial observations - PD 3.4.19

Action required

Draft Departmental Observations on the NBP Memo attached for consideration

Executive summary

We received the Draft Memo for Government on the National Broadband Plan from DCCAE on Wednesday, 1 May, requesting that observations be returned by 2pm on Thursday, 2nd May.

We have previously provided our views on this proposal on a number of occasions - the latest submission on the issue is attached for reference. We have again set out below our views on the proposal, and we attach draft Departmental Observations on the Memo for your consideration - which are in line with our previous views/advice on the matter.

We understand that the Department of Finance has provided observations on the macroeconomic impact which are consistent with the views set out in our observations.

We are available to discuss.

Comments

Brendan Ellison - 02/05/2019 13:40

Submission attached, based on and incorporating/attaching draft Obs already sent to the Minister this morning by email.

Robert Watt - 03/05/2019 11:54

Thank you - I will make some changes and then we can resubmit.

Brendan Ellison - 03/05/2019 14:52

As discussed

Robert Watt - 03/05/2019 15:18

Minister, Please see our final Departmental observations in relation to the National Broadband plan. I strongly support these observations. Robert

Pamela Roche - 07/05/2019 09:08

Thanks all. These are to be issued in addition to my ministerial observations - PD 3.4.19

Detailed information

Summary

The Department of Public Expenditure and Reform supports the ambition to extend high speed broadband more widely to areas that are currently not well served. We believe there is a strong case for public subsidy to underpin the significant investment that has already been taken by the private sector. We believe this investment should proceed quickly, but incrementally, having regard to delivery costs - in particular the significant costs of reaching more sparsely populated locations - and the benefits of cheaper emerging technologies which have the potential to meet this policy objective in a cost effective manner over time.

However, we strongly recommend against approval of the appointment of the preferred bidder to the current NBP procurement process, on grounds of:

- cost and affordability;
- impact on the NDP and on projects forgone as a result;
- value for money and, specifically, uncertain benefits;
- unprecedented risk for the Exchequer; and
- compatibility with the spatial objectives of Project Ireland 2040

Incremental improvements in broadband based on NDP investment are more affordable and sustainable from a risk perspective. The Department believes that significant progress can be made with an alternative affordable approach, with strong deliverables possible in the short-medium term within the context of a more realistic and affordable budget (of, say, €1b). This would prioritise investments to complete the main infrastructure backbone across the country. This approach could increase broadband availability rapidly while minimising the unprecedented risks associated with this project including: construction cost inflation, potential low take up and commitment to an approach for the most expensive premises which, over time, will in all likelihood be surpassed by cheaper technologies. Our alternative approach allows these risks to be managed and investment decisions to be taken at more appropriate intervals, over time, as more information on costs, benefits and new

technologies emerge. This is a more prudent approach to a long-term investment of this nature compared with committing to a 25 year contract which, by its nature, does not have the same flexibilities.

Such an approach would involve close engagement between the Department of Communications Climate Action and Environment, the Office of the Government Chief Information Officer and, possibly, the Department of Rural and Community Development, to maximise the outcome achievable from the available funding. It would also allow the potential for further significant investment as new information becomes available.

Cost and Affordability

The level of State funding required for the 25 year project is **€2.977 billion** - of which €2.331 billion is stated to be required over the period of the NDP, as follows:

	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029-2043	Total
Projected Subsidy												
Conditional Subsidy												
Contingent Subsidy (Encroachment)												
Total Potential Cost	29	169	274.7	301.4	395.5	373.2	397.9	313.9	76.5	73.8	572.3	2,977
Existing NDP allocation	-75	-75	-75	-90	-90	-90	-91.5	-91.5	-92	0	0	-770
Unused 2019 NDP re-allocation (carry-forward)		-28										-28
Additional Vote Funding requirement Including conditional/contingency subsidy	0	66	199.7	211.4	305.5	283.2	306.4	222.4	15.5	73.8	572.3	2,225

This compares with an initial estimate of €800m as the required State subsidy, in September 2017.

In terms of affordability, signing the NBP contract would require the provision of **an additional €477 million** of capital funding to the Department of Communications Climate Action and Environment over the period 2019 - 2022, and **over €1.5 billion** additional funding in total over the period of the NDP - this is over and above the €800m already provided for it within the NDP allocations to 2027. This additional funding requirement is on top of the additional capital funding of €385m required over the 2020-2022 period to meet the increased cost of the National Children's Hospital. There is also pressure for increased funding for the higher ambition on Climate Action measures being proposed by the Minister for Communications Climate Action and Environment for inclusion in the new draft *All of Government Plan on Climate Disruption*.

From the perspectives of sustainable management of the public finances, and avoiding further stimulation of construction sector inflation, we do not consider that public capital investment should be expanded by more than the accelerated rate already envisaged in the NDP. We have already seen the rapid re-emergence of tender price inflation and the

existing NDP capital envelope already involves consistent increases in capital investment annually over the period of the Plan. Accordingly, if approved, this additional funding requirement should be met by reprioritisation and reallocation of resources within the existing NDP Capital Allocations, rather than by increasing the rate of capital investment growth even further than provided for in the NDP.

Impact on the NDP and other planned investments

In terms of impact of this additional funding required for Broadband on the wider NDP, the reallocation of this level of capital funding from other Departments' published NDP capital allocations would have serious implications for other planned investments – requiring the cancellation or delay of a wide range of planned investments across other priority areas of government investment, such as social housing, education, health and climate action. By way of example, and for illustrative purposes only, a **€1.5 billion** reallocation of funding will have implications for other projects:

- Local authority direct build social housing delivery of 2,000 units (**€400m**)
- Delivery of the Tralee Wastewater Network (**€23m**) and the Kilkenny Regional Water Supply Scheme (**€21m**)
- Sligo Western Distributor Road (**€18m**), Killaloe Bypass (**€34m**), Dunkettle Interchange (**€100m**) and Moycullen Bypass (**€52m**)
- Planned Exchequer investments in Dundalk, Tallaght and Limerick IoTs (**€40m**)
- Delivery of 18 primary schools serving 8,600 pupils (**€90m**)
- Delivery of new ambulance bases and deployment points (**€39m**)
- Delivery of 9 to 10 primary care centres (**€100m**)
- Significant reductions in allocations from remaining programmes, including flood relief works, prisons, etc.

Recent experience in trying to secure additional capital for the overrun on the National Children's Hospital within the existing capital budget highlights how difficult a task this is. It is also to be noted that the capital expenditure outlined above is to be delivered by Government as there is little or no interest from the private sector in providing these services (other than perhaps under PPP-type arrangements). In contrast, there is significant commercial investment in the provision of high speed broadband and this is constantly expanding.

It should also be noted that it will also be necessary to return to the topic of capital reallocations to fund the post-2019 costs entailed by the Decision to proceed with the new National Children's Hospital, and to address costs arising from Brexit.

Value for Money

In terms of value for money, we have major concerns in relation to the credibility of the CBA for the National Broadband Plan - the justification for spending of up to €3 billion to make broadband available to perhaps 20% of premises (many of which, it is understood, are holiday homes which are empty for most of the year) has not been demonstrated satisfactorily. The Department believes that this involves excessive costs and risks for the Irish taxpayer with questionable benefits, many of which are private benefits but to be funded at public cost. The Department does not believe the public benefits that will accrue from the project justifies the use of scarce public funds on this scale – and certainly the benefits are questionable compared to the clear public good benefits of investment in schools, health facilities and public housing.

The €3 billion proposed investment represents over €6,000 per household in the catchment area. Assuming a take-up of 30 per cent this equates to a subsidy cost of €20,000 on average per household. In addition, households will pay a service cost per year to the

service provider. Benefits of high speed broadband would have to exceed these costs to represent value for money. No study exists which suggests that households put the benefits as high as this. More specifically, the average costs are increased because of the cost of investment in fibre in more sparsely populated areas. Providing alternative options for these areas would reduce the average cost per household significantly and enhance the value for money of this proposition. This is, in effect, our alternative proposal.

As set out above, we support subsidisation of the underlying backhaul infrastructure using public funds. However, providing the scale of investment to all areas is unaffordable. In addition, this proposal provides large subsidies for individual connections (up to €5,000 per connection), conveying significant private benefits at such a high cost to the taxpayer. We understand that this is not consistent with the approach to connecting providers to other networks where a larger charge would apply.

Furthermore, under this proposal the State will not own the asset, despite investing up to €3 billion in it (as compared with a private sector equity investment risk of only [REDACTED]). In effect, the private operator will have all of their monies paid back by [REDACTED] while the Exchequer could have paid out [REDACTED] by that stage. In these circumstances, it is a challenge to conclude that this contract represents value for money for the State or is in the best interests of the taxpayer. The lack of a competitive process in arriving at the final bid is also a real concern for the Department in terms of assessing the value for money of the final proposed solution.

In addition, we have raised issues in relation to the CBA analysis undertaken on the NBP on an ongoing basis. Most recently, concerns were expressed in February 2019 in relation to the overstatement of net additional benefits. The latest (final) revised version of the CBA has responded to these concerns and made changes which reduce the benefit of the project (in present value terms) by a total of €1.13 billion which, all things equal, would have reduced the net present value to below zero, meaning that the project would be below the break-even rate in economic terms and have a Benefit to Cost Ratio of less than 1.

However, as these benefits were reduced the cost side of the CBA was also changed very significantly with costs to the operator, again in present value terms, being reduced by €1.079 billion – apparently due to an error which had gone unspotted in all previous iterations of the analysis. This discovered reduction in costs fortuitously compensates for the reduction in benefits arising from our observations on the previous version of the CBA. In summary, the CBA is not credible and it is questionable whether it is consistent with the Public Spending Code.

Risk to the Exchequer

From a risk perspective, we believe that the State is being asked to take on unprecedented risk associated with this project:

- The Government is being asked to commit up to €3 billion of Exchequer funding – of which up to €2.3 billion will be required by 2027, which will provide returns to the private operator and owner of the asset while they are only risking [REDACTED] of equity. This equity provided is [REDACTED] of the total project cost.
- For this equity of [REDACTED] they will own the entire asset while accepting the State has mechanism to safeguard the taxpayers' interest in the event of non-performance and may share in any upsides.
- Technology in this area is changing rapidly – we do not know what new and cheaper technological advances will be made in the coming decades that could make this particular model outdated or even obsolete or could encourage other broadband providers to expand into the intervention area.
- Many of the projected benefits are uncertain.

- There is risk associated with the heavy reliance on eir's existing network (██████) of the cost relates to renting poles from eir and e-net and providing this income to eir) and the capacity of the bidder to deliver the project.
- There is also significant project viability risk associated with the take-up of the service. A poor level of take up could completely undermine the value for money of the project.
- There is also potential construction risk, as it is impossible to be certain as to what issues could be faced once excavation for poles or ducts actually commences.

As a result, the State is taking on unprecedented risk with this project. Poor take up of the service or emerging new technological solutions in this fast moving market could leave the State having funded a stranded, or potentially obsolete, asset - an asset that the State will not even own, despite investing up to €3 billion in it (as compared with a private sector equity investment risk of only ██████). In effect, the private operator will have all of their monies paid back by ██████ while the Exchequer could have paid out ██████ by that stage.

We are also concerned that the future risk associated with guaranteeing service provision over 25 years cannot, in reality, be transferred to the operator - were they to incur losses that wiped out their initial ██████ equity stake in the project, there would be no incentive to continue to honour the contract for its duration, risking further losses, in which case the cost of continuing the project would fall back on the Exchequer.

Compatibility with the NPF/Project Ireland 2040

The National Planning Framework/Project Ireland 2040 seeks to encourage smart compact growth, that is more sustainable from a climate action perspective and that facilitate the provision of focused public services in key locations rather than spread out over a wide area. The signal being given under the proposed NBP - that Government is prepared to continue to pay large connection subsidies for new houses or businesses irrespective of where they are located - runs counter to the underlying spatial planning objectives of Project Ireland 2040, Government's objective of encouraging sustainable communities from a climate action perspective, and policy in relation to connection to all other utilities.

Alternative Approach

We believe that significant progress can be made with an alternative affordable approach, with strong deliverables possible in the short-medium term within the context of a more realistic and affordable budget (of, say, €1b), prioritising completing critical investments in the short term.

If it emerges, during the roll-out of the scheme, that there is strong take up of the scheme and also that significant benefits are actually realised for the investment, the programme could be accelerated to extend coverage. The availability of new technologies would also be a factor.

Such an approach would involve close engagement between the Department of Communications Climate Action and Environment, the Office of the Government Chief Information Officer and, possibly, the Department of Rural and Community Development, to maximise the outcome achievable from the available funding in the initial phase.

Such an affordable option could involve:

- An immediate procurement by DCCAE (also involving OGCIO and DRCD) to deliver high speed broadband to circa 300 broadband connection points (BCPs) within two years and circa 1000 locations after that.
- The BCPs would be made available at these locations for a 10 year period.

- In addition, DCCAE would commence tender processes to procure the most extensive broadband coverage nationally that the budget would support, including the design and build of the network and a separate contract for the operation and maintenance of the broadband network once it is built.
- The establishment of a new broadband agency/office (within DCCAE initially), to be responsible for the revised delivery of the NBP. An in-house structure could be established relatively quickly retaining and utilising expertise built up to date in the process (in a similar manner to the establishment of the LDA), to immediately begin work on a revised plan to deliver high speed broadband to the 300 BCPs and circa 1000 locations identified as quickly as possible.
- Exploring how best to exploit assets and plans that eir, ESB and Imagine already have, in a 'greenfield' policy space.
- Further exploring the options that 5G will offer, to complement fibre to the home in very remote areas. Fibre should only be part of an overall digital connectivity programme which includes 5G and TETRA LTE and which are threatened together to maximise impact and VFM.
- Revisiting the "gap funding" approach / private sector ownership model – which we understand was largely driven by the (unsuccessful) objective of keeping the project off balance sheet.

Related submissions

PER 00309-19: Note for Minister on National Broadband Plan

User details

INVOLVED: Peter Molloy
Patricia Coleman
Brendan Ellison
Sub_PER Sec Gen Office
Robert Watt
Sub_PER Ministers Office
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READ RECEIPT: Brendan Ellison
Patricia Scanlon
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Pamela Roche
Claire Godkin
Michelle O'Connor
Mary Ryan
Niamh Callaghan (PER)
Ed Brophy
Peter Molloy
Patricia Coleman

Action log

ACTION	DESCRIPTION	USER	DATE
Create	Submission PER 00431-19 to Minister created.	Brendan Ellison	01/05/2019 15:31
Attachment removed	Attachment Draft DPER obs on the NDP Draft Memo.docx removed.	Brendan Ellison	02/05/2019 13:31
Submission sent	Submission sent by email to Brendan Ellison, Patricia Coleman, Peter Molloy.	Brendan Ellison	02/05/2019 13:39
Submit for review	Submission sent for review to Secretary General.	Brendan Ellison	02/05/2019 13:40
Revert	Submission reverted to Brendan Ellison by Robert Watt.	Robert Watt	03/05/2019 11:54
Attachment removed	Attachment Draft Departmental obs on the NDP Draft Memo for Government 2 May 2019.docx removed.	Brendan Ellison	03/05/2019 14:50
Submit for review	Submission sent for review to Secretary General.	Brendan Ellison	03/05/2019 14:52
Submission sent	Submission sent by email to Patricia Coleman, Peter Molloy, Barry Lowry.	Brendan Ellison	03/05/2019 14:54
Submit for review	Submission sent for review to Minister on behalf of Secretary General.	Robert Watt	03/05/2019 15:18
Complete	Submission completed by Pamela Roche.	Pamela Roche	07/05/2019 09:08
Add involved user	Submission shared with Peter Molloy, Patricia Coleman.	Brendan Ellison	07/05/2019 12:44
Submission sent	Submission sent by email to Peter Molloy.	Peter Molloy	07/05/2019 13:45